

May 2015 Climate Review for Puerto Rico and the U.S. Virgin Islands

...Based on data received until June 10th...

SAN JUAN



Synopsis

A fair and stable weather pattern prevailed across the local islands during May with mostly clear skies and a few locally induced showers. An average rainfall total of 2.32 and 0.89 inches was observed across Saint Thomas/Saint John and Saint Croix, respectively. This is just 59% and 23% of their normal rainfall for the month of May. Across Puerto Rico, an average rainfall total of 4.15 inches was observed, which is 3.06 inches below normal.

In terms of temperature, the islandwide mean temperature was 78.9°F which is approximately 1.8°F warmer than the 30-year average. The highest maximum temperature recorded this month was 97°F at Rio Piedras Substation on 05/11, and the lowest minimum temperature was 62°F on 05/03 at Lajas Substation. Overall, May can be described as a dry and hot month across Puerto Rico and Saint Croix.

Based on radar and raingauge data retrieved from the Advance Hydrologic Prediction Service (AHPS) as well as COOP data, short and long term rainfall deficits are observed across the eastern half of Puerto Rico as well as Saint Thomas/Saint John and Saint Croix. In the case of eastern Puerto Rico, 2015 rainfall deficit combined with 2014 and 2013 rainfall deficits has resulted in moderate to severe drought conditions. Under El Niño conditions, this dry pattern will continue across the area.





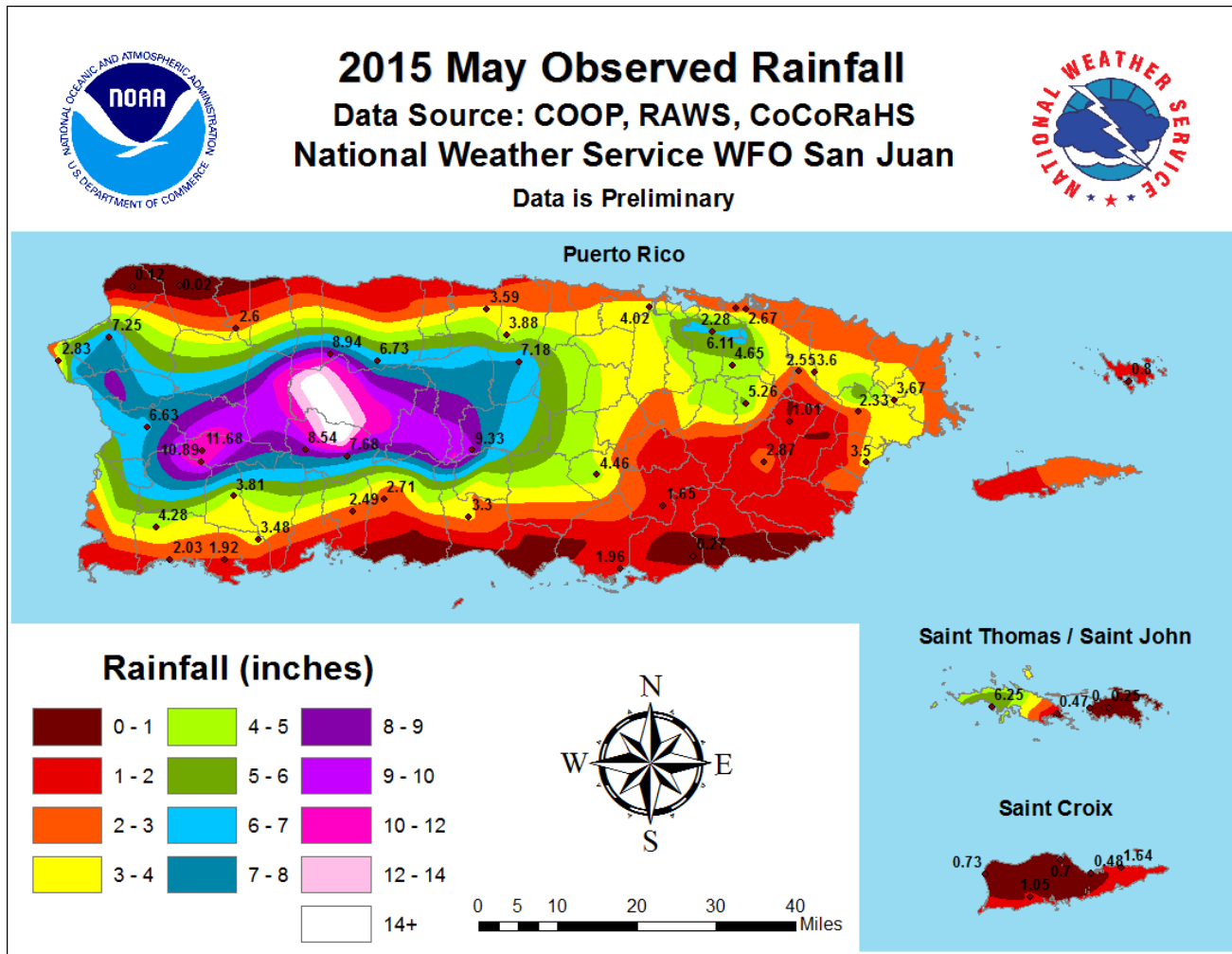
RAINFALL

WFO

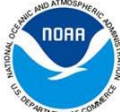
Islandwide climate record period: **1940 to 2015**
San Juan Metro Area climate record period: **1898 to 2015** (*Primary climatological site*)
Cyril E. King Airport/St Thomas climate record period: **1953 to 2015** (*Primary climatological site*)
Henry E. Rohlsen Airport/St Croix climate record period: **1951 to 2015** (*Primary climatological site*)
Following WMO criteria: Less than 10% of missing values



Click on image to enlarge



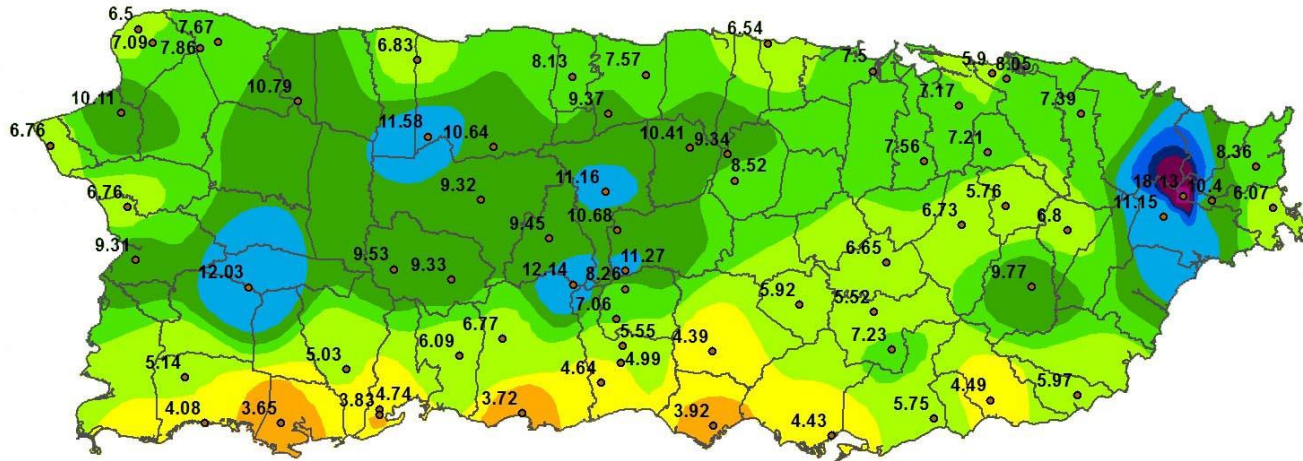
http://www.srh.noaa.gov/sju/?n=pr_usvi_normals



May Normal Rainfall 1981 - 2010



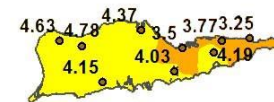
PUERTO RICO



Monthly Rainfall (Inches)



ST. THOMAS / ST. JOHN



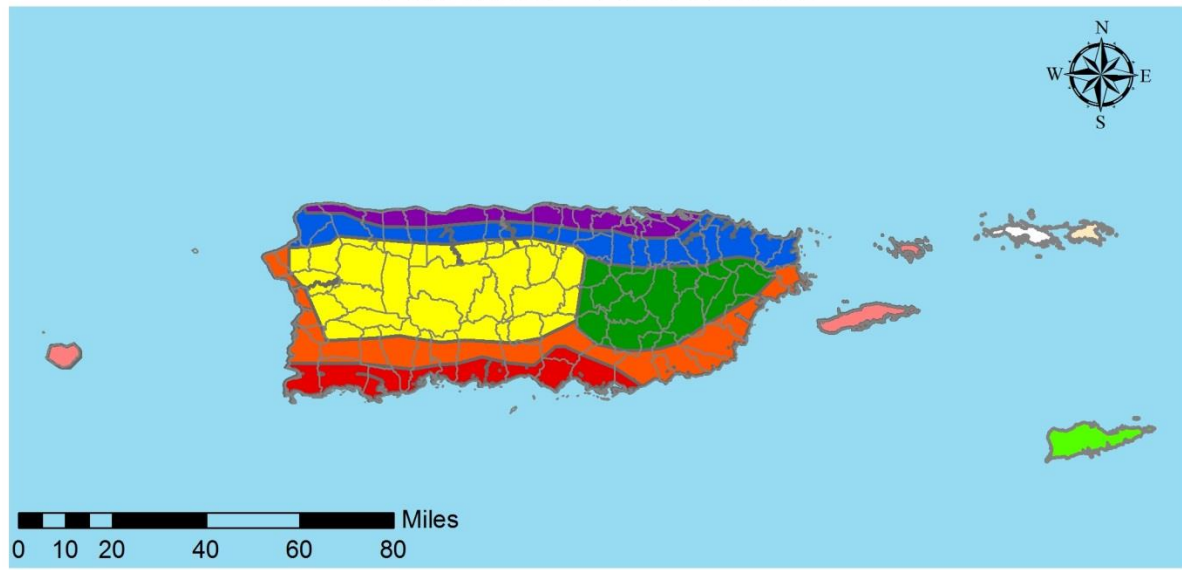
ST. CROIX





2015 Average Rainfall Accumulation per Climate Zones

Puerto Rico and U.S. Virgin Islands Climate Divisions



Climate Divisions and Codes

NORTH COASTAL - 6601	SOUTHERN SLOPES - 6604	OUTLYING ISLANDS - 6607
SOUTH COASTAL - 6602	EASTERN INTERIOR - 6605	SAINT THOMAS - 6701
NORTHERN SLOPES - 6603	WESTERN INTERIOR - 6606	SAINT CROIX - 6702
		SAINT JOHN - 6703



2015 Average Rainfall Accumulation per Climate Zones

North Coastal	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	3.98	3.81	2.73	1.82	4.17	---	---	---	---	---	---	---
NORMAL	4.06	2.96	2.87	5.16	7.24	---	---	---	---	---	---	---
%PON PER MONTH	98	129	95	35	58	---	---	---	---	---	---	---
ACCUMULATED	3.98	7.79	10.52	12.34	16.51	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	4.06	7.02	9.89	15.05	22.29	---	---	---	---	---	---	---
% PON ACCUMULATED	98	111	106	82	74	---	---	---	---	---	---	---

South Coastal	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	1.92	1.85	1.79	1.18	2.45	---	---	---	---	---	---	---
NORMAL	1.62	1.45	1.78	2.76	4.39	---	---	---	---	---	---	---
%PON PER MONTH	119	128	101	43	56	---	---	---	---	---	---	---
ACCUMULATED	1.92	3.77	5.56	6.74	9.19	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	1.62	3.07	4.85	7.61	12.00	---	---	---	---	---	---	---
% PON ACCUMULATED	119	123	115	89	77	---	---	---	---	---	---	---

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2015 Average Rainfall Accumulation per Climate Zones

Northern Slopes	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	4.32	3.80	1.98	2.83	1.98	---	---	---	---	---	---	---
NORMAL	4.20	3.03	3.23	5.26	7.47	---	---	---	---	---	---	---
%PON PER MONTH	103	125	61	54	27	---	---	---	---	---	---	---
ACCUMULATED	4.32	8.12	10.10	12.93	14.91	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	4.20	7.23	10.46	15.72	23.19	---	---	---	---	---	---	---
% PON ACCUMULATED	103	112	97	82	64	---	---	---	---	---	---	---

Southern Slopes	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	2.39	2.84	2.00	1.47	2.68	---	---	---	---	---	---	---
NORMAL	2.00	1.86	2.28	3.91	5.90	---	---	---	---	---	---	---
%PON PER MONTH	120	153	88	38	45	---	---	---	---	---	---	---
ACCUMULATED	2.39	5.23	7.23	8.70	11.38	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	2.00	3.86	6.14	10.05	15.95	---	---	---	---	---	---	---
% PON ACCUMULATED	120	135	118	87	71	---	---	---	---	---	---	---

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2015 Average Rainfall Accumulation per Climate Zones

Eastern Interior	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	4.34	5.83	2.70	1.89	3.11	---	---	---	---	---	---	---
NORMAL	4.69	3.92	3.90	5.26	8.15	---	---	---	---	---	---	---
%PON PER MONTH	93	149	69	36	38	---	---	---	---	---	---	---
ACCUMULATED	4.34	10.17	12.87	14.76	17.87	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	4.69	8.61	12.51	17.77	25.92	---	---	---	---	---	---	---
% PON ACCUMULATED	93	118	103	83	69	---	---	---	---	---	---	---

Western Interior	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	3.60	5.06	3.79	6.65	7.25	---	---	---	---	---	---	---
NORMAL	3.90	2.75	3.57	6.77	10.09	---	---	---	---	---	---	---
%PON PER MONTH	92	184	106	98	72	---	---	---	---	---	---	---
ACCUMULATED	3.60	8.66	12.45	19.10	26.35	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	3.90	6.65	10.22	16.99	27.08	---	---	---	---	---	---	---
% PON ACCUMULATED	92	130	122	112	97	---	---	---	---	---	---	---

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2015 Average Rainfall Accumulation per Climate Zones

Mainland PR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	3.45	4.15	2.71	3.33	4.15	---	---	---	---	---	---	---
NORMAL	3.41	2.66	2.94	4.85	7.21	---	---	---	---	---	---	---
%PON PER MONTH	101	156	92	69	58	---	---	---	---	---	---	---
ACCUMULATED	3.45	7.60	10.31	13.64	17.79	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	3.41	6.07	9.01	13.86	21.07	---	---	---	---	---	---	---
% PON ACCUMULATED	101	125	114	98	84	---	---	---	---	---	---	---

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2015 Average Rainfall Accumulation per Climate Zones

Saint Thomas/Saint John	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	1.46	3.92	1.26	0.54	2.32	---	---	---	---	---	---	---
NORMAL	2.72	1.71	1.47	2.92	3.90	---	---	---	---	---	---	---
%PON PER MONTH	54	229	86	18	59	---	---	---	---	---	---	---
ACCUMULATED	1.46	5.38	6.64	7.18	9.50	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	2.72	4.43	5.90	8.82	12.72	---	---	---	---	---	---	---
% PON ACCUMULATED	54	121	113	81	75	---	---	---	---	---	---	---

Saint Croix	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	2.17	1.66	0.96	1.93	0.89	---	---	---	---	---	---	---
NORMAL	2.00	1.61	1.53	2.47	3.88	---	---	---	---	---	---	---
%PON PER MONTH	109	103	63	78	23	---	---	---	---	---	---	---
ACCUMULATED	2.17	3.83	4.79	6.72	7.61	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	2.00	3.61	5.14	7.61	11.49	---	---	---	---	---	---	---
% PON ACCUMULATED	109	106	93	88	66	---	---	---	---	---	---	---

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May 2015 in Perspective

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Top 5 **Wettest**

Top 5 **Driest**

Islandwide

Year	Inches
May-86	15.77
May-45	14.28
May-11	13.90
May-40	13.46
May-65	12.65

Year	Inches
May-90	2.67
May-74	2.92
May-73	3.05
May-94	3.20
May-67	3.33

Mean Rainfall:
7.21 inches

**Total rainfall
accumulation:**
4.15 inches

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May 2015 in Perspective

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Top 5 **Wettest**

Top 5 **Driest**

San Juan Metro Area

Year	Inches
1936	16.88
1965	14.99
2013	14.54
1902	13.97
1932	13.82

Year	Inches
1972	0.44
1973	0.48
1925	0.71
1975	1.04
1923	1.13

Mean Rainfall:
5.90 inches

Total rainfall
accumulation:
2.28 inches

May 2015 ended
as the 15th driest
May on record.



May 2015 in Perspective

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Top 5 **Wettest**

Top 5 **Driest**

Cyril E. King Airport St Thomas

Year	Inches
1979	9.98
1987	9.8
1980	8.22
2011	8.04
1958	7.00

Year	Inches
2008	0.06
2007	0.28
1973	0.47
1975	0.58
1954	0.61

Mean Rainfall:
3.06 inches

Total rainfall
accumulation:
6.25 inches

**May 2015 ended
as the 9th
wettest May on
record.**



May 2015 in Perspective

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Top 5 **Wettest**

Henry E. Rohlsen Airport St Croix

Year	Inches
1981	14.03
2001	11.38
1987	8.89
1979	8.42
1992	8.33

Top 5 **Driest**

Year	Inches
1974	0.22
2003	0.37
2002	0.39
1977	0.42
1991	0.53

Mean Rainfall:
4.15 inches

Total rainfall
accumulation:
1.05 inches

May 2015 ended
as the 12th driest
May on record.



May 2015 in Perspective

Wettest Days

Station	Inches	Date
ARECIBO OBSY	5.59	5/16/2015
MOROVIS 1 N	4.92	5/30/2015
MARICAO FISH HATCHERY	3.62	5/26/2015
COLOSO	2.9	5/21/2015
TRUJILLO ALTO 2 SSW	2.44	5/21/2015

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May 2015 Highlights for Primary Climatological Data Sites

Wettest Days

San Juan Metro Area

Inches	Date
1.01	5/20/2015
0.51	5/29/2015
0.41	5/31/2015
0.11	5/16/2015
0.07	5/9/2015

Cyril E. King AP/St Thomas

Inches	Date
3.84	5/16/2015
1.02	5/19/2015
0.77	5/17/2015
0.32	5/27/2015
0.15	5/25/2015

Henry E. Rohlsen AP/St. Croix

Inches	Date
0.22	5/29/2015
0.22	5/26/2015
0.19	5/10/2015
0.15	5/16/2015
0.13	5/30/2015

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TEMPERATURE

Islandwide climate record period: 1940 to 2015

San Juan Metro Area climate record period: 1898 to 2015 (Primary climatological site)

Cyril E. King Airport/St Thomas climate record period: 1953 to 2015 (Primary climatological site)

Henry E. Rohlsen Airport/St Croix climate record period: 1951 to 2015 (Primary climatological site)

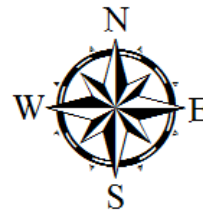
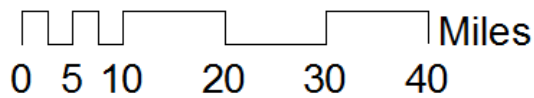
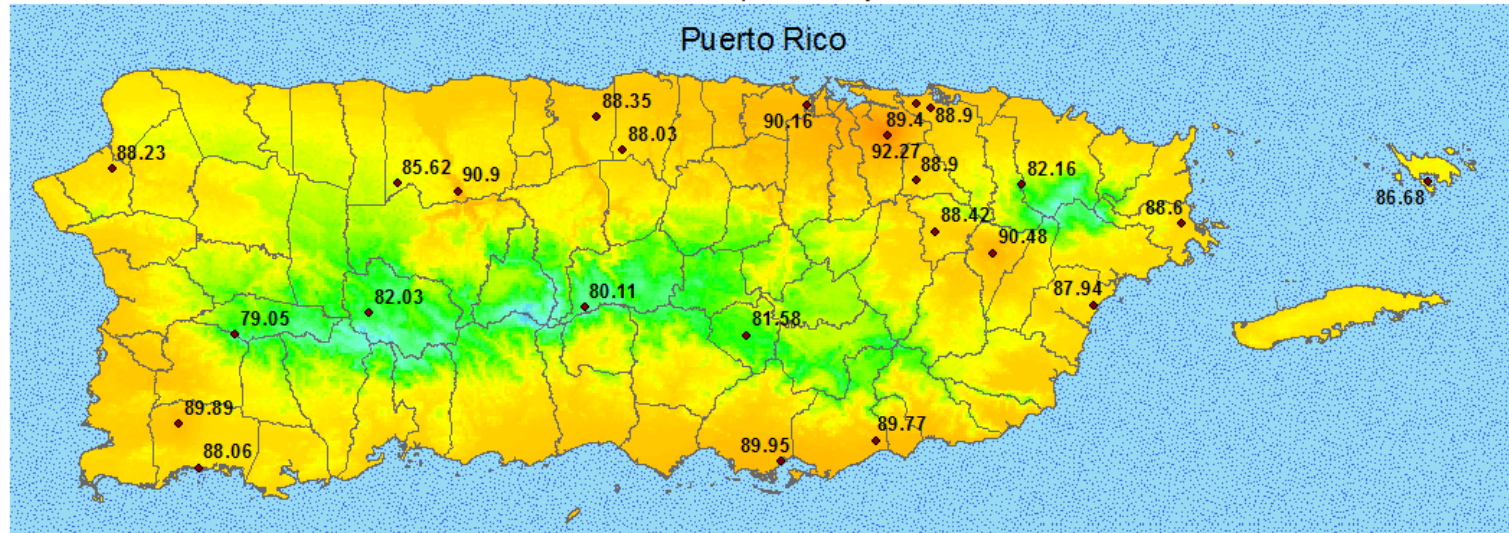
Following WMO criteria: Less than 10% of missing values





2015 May Mean Maximum Temperatures

National Weather Service WFO San Juan
Data is preliminary



Temperature Range °F

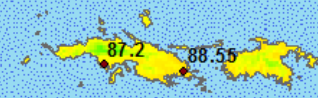


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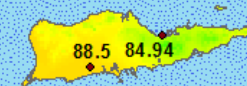
80

Low : 60

Saint Thomas / Saint John



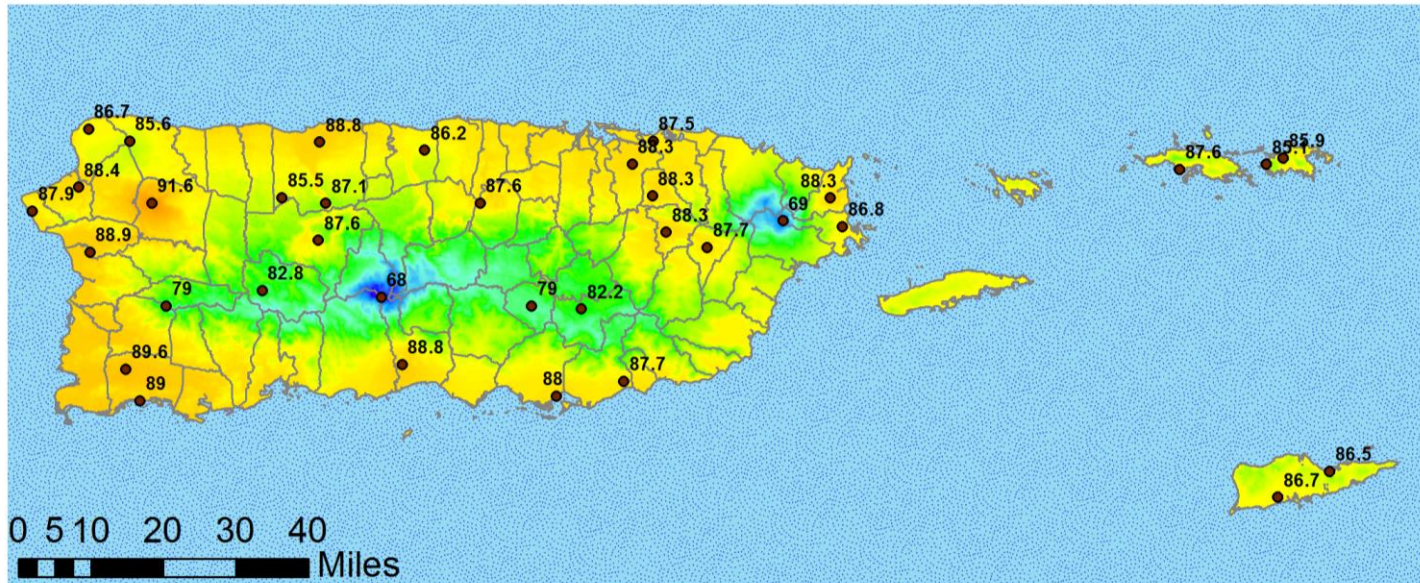
Saint Croix





May Normal Maximum Temperatures 1981-2010

National Weather Service WFO San Juan



Temperature Range °F



High : 100

80

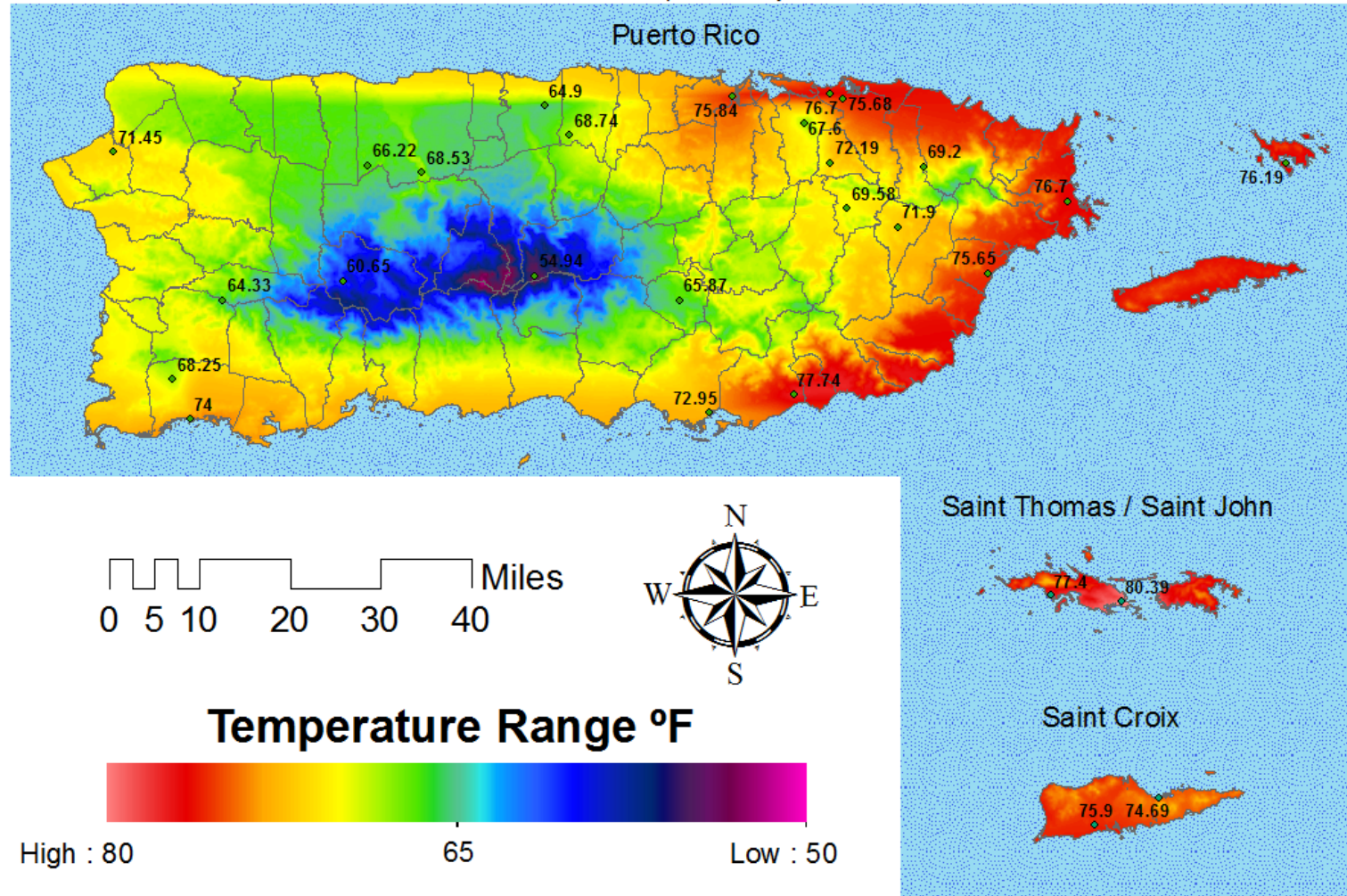
Low : 60





2015 May Mean Minimum Temperatures

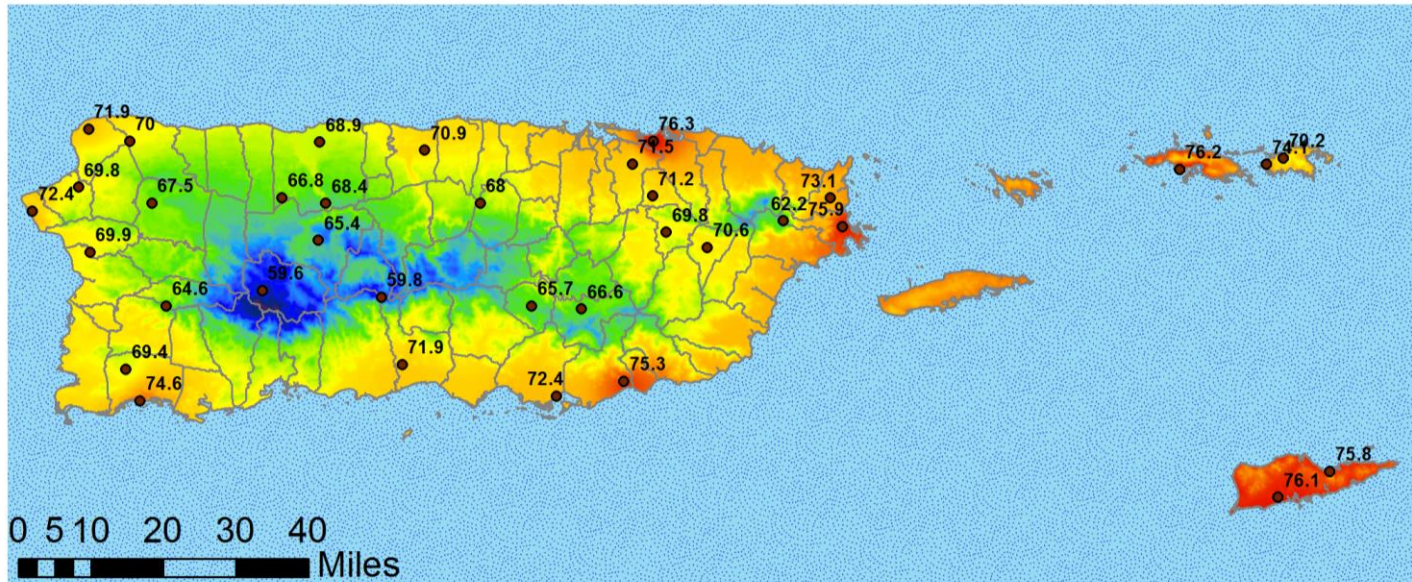
National Weather Service WFO San Juan
Data is preliminary





May Normal Minimum Temperatures 1981-2010

National Weather Service WFO San Juan



Temperature Range °F



High : 80

65

Low : 50



May 2015 in Perspective: Mean Avg. Temperature

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Top 5 Warmest

Top 5 Coolest

Islandwide

Year	°F
May-69	79.3
May-48	79.3
May-10	79.1
May-51	79.0
May-15	78.9

Year	°F
May-43	70.0
May-40	70.3
May-41	70.3
May-44	73.0
May-42	75.2

Mean Temperature:
77.1 °F

May 2015 ended as
the 5th warmest
May on record.

Following are not included because do not WMO meet criteria 56,57,59,67,76,79,80,81



May 2015 in Perspective: Mean Avg. Temperature

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Top 5 Warmest

Top 5 Coolest

San Juan Metro Area

Year	°F
1980	83.8
1981	83.4
2007	83.3
1983	83.2
2015	83.1

Year	°F
1913	76.1
1929	76.7
1918	76.8
1943	77.2
1946	77.3

Mean
Temperature:
81.9 °F

**May 2015 ended as
the 5th warmest
May on record.**



May 2015 in Perspective: Mean Avg. Temperature

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Top 5 Warmest

Cyril E. King Airport St Thomas

Year	°F
1994	85.9
1973	83.5
1993	83.4
1979	83.1
2010	82.8

Top 5 Coolest

Year	°F
1959	79.3
1957	79.7
1986	79.8
1956	79.8
1963	80.0

Mean Temperature:
81.9 °F

May 2015 mean
temperature 82.3 °F

May 2015 ended as
the 10th warmest
May on record.



May 2015 in Perspective: Mean Avg. Temperature

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Top 5 Warmest

Henry E. Rohlsen Airport St Croix

Year	°F
1988	83.6
1973	83.4
1972	83.3
1977	83.2
1998	83.1

Top 5 Coolest

Year	°F
1982	76.8
1979	78.4
1959	79.2
1955	79.4
2011	79.7

Mean Temperature:
81.4 °F

May 2015 mean
temperature 82.2 °F

May 2015 ended as
the 9th warmest
May on record.



May 2015 Highlights

Highest **Maximum** Temps

Station	Value (°F)	Date
RIO PIEDRAS EXP STN	97	5/11/2015
TOA BAJA LEVITOWN	96	5/1/2015
LAJAS SUBSTATION	94	5/26/2015
MANATI 2 E	94	5/8/2015
WFO SAN JUAN	94	5/1/2015

Lowest **Minimum** Temps

Station	Value (°F)	Date
LAJAS SUBSTATION	62	5/3/2015
MARICAO 2 SSW	62	5/19/2015
AGUIRRE	64	5/12/2015
AIBONITO	64	5/28/2015



2015 Highlights for Primary Climatological Data Sites

Spring

	Mar	Apr	May	Season	YTD Data until 5/31
San Juan	---	4 th warmest	15 th driest and 5 th warmest	5 th driest and 6 th warmest	4 th warmest
Saint Thomas	---	8 th driest	9 th wettest and 10 th warmest	14 th warmest	wettest
Saint Croix	10 th driest	7 th driest and 7 th warmest	9 th warmest and 12 th driest	2 nd driest and 7 th warmest	5 th warmest and 2 nd driest

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2015 Highlights for Primary Climatological Data Sites

Winter

	Dec (2014)	Jan	Feb	Season
San Juan	---	3 rd warmest	6 th warmest	5 th warmest
Saint Thomas	---	---	wettest February and 6 th wettest month	wettest
Saint Croix	8 th wettest	14 th driest	6 th warmest	---

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LOOKING AHEAD TOWARD JUNE

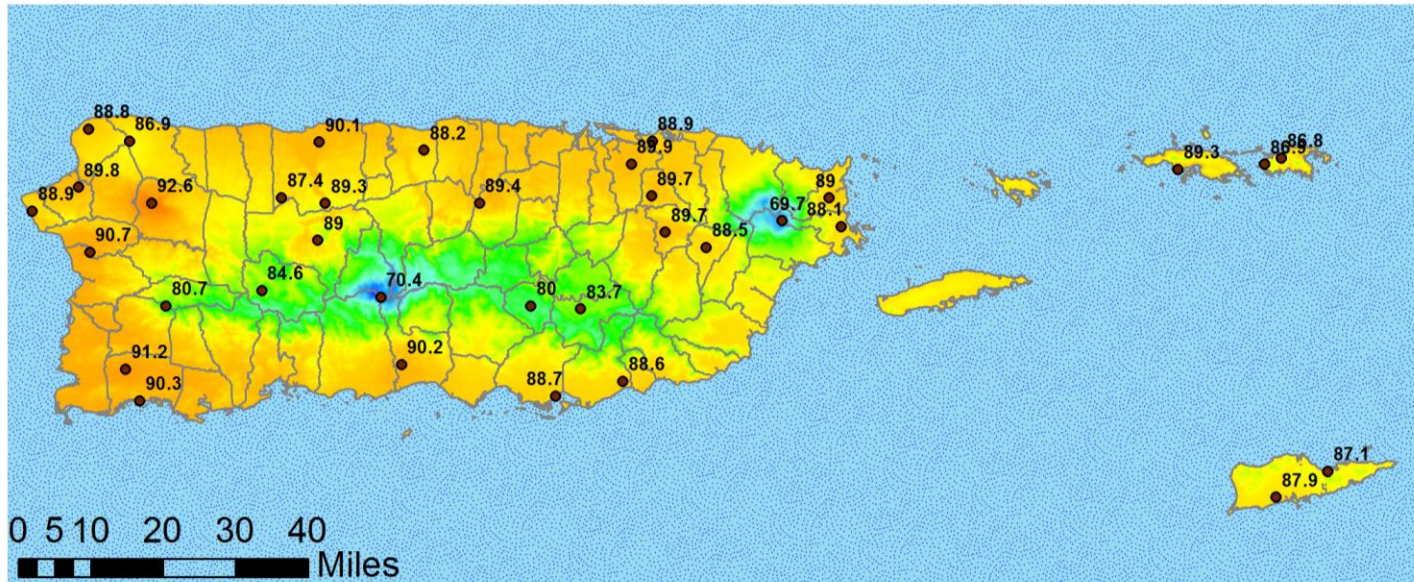
NATIONAL WEATHER SERVICE
WFO
SAN JUAN





June Normal Maximum Temperatures 1981-2010

National Weather Service WFO San Juan



Temperature Range °F



High : 100

80

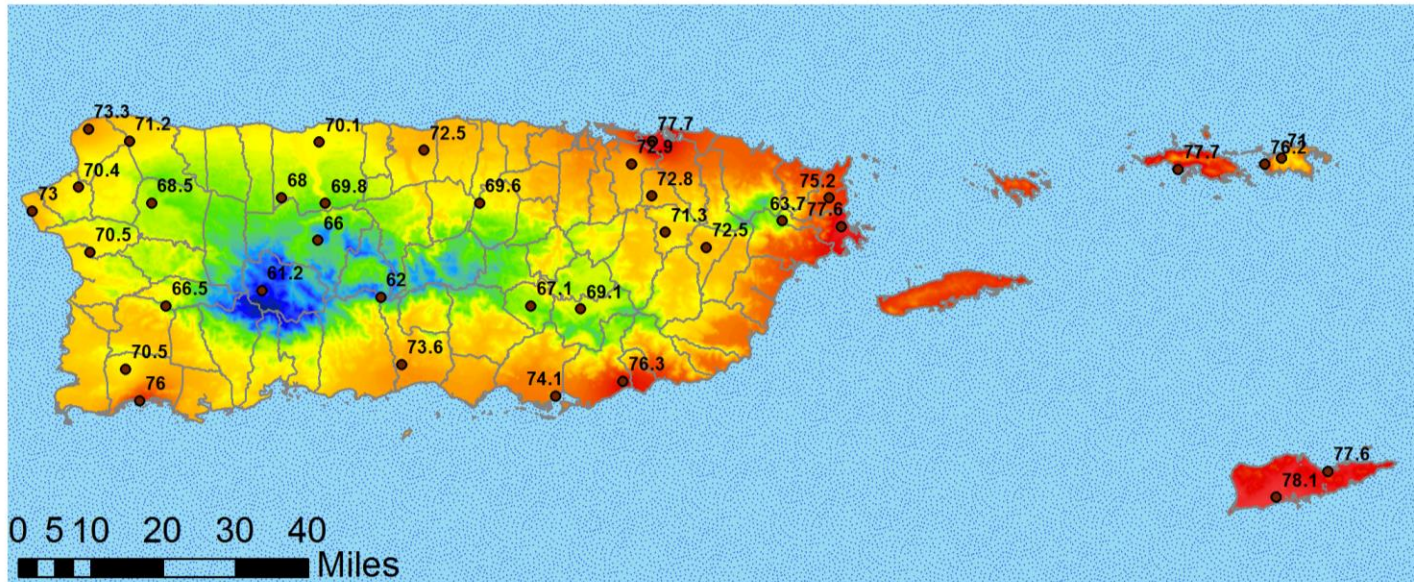
Low : 60





June Normal Minimum Temperatures 1981-2010

National Weather Service WFO San Juan



Temperature Range °F

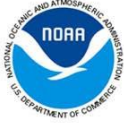


High : 80

65

Low : 50

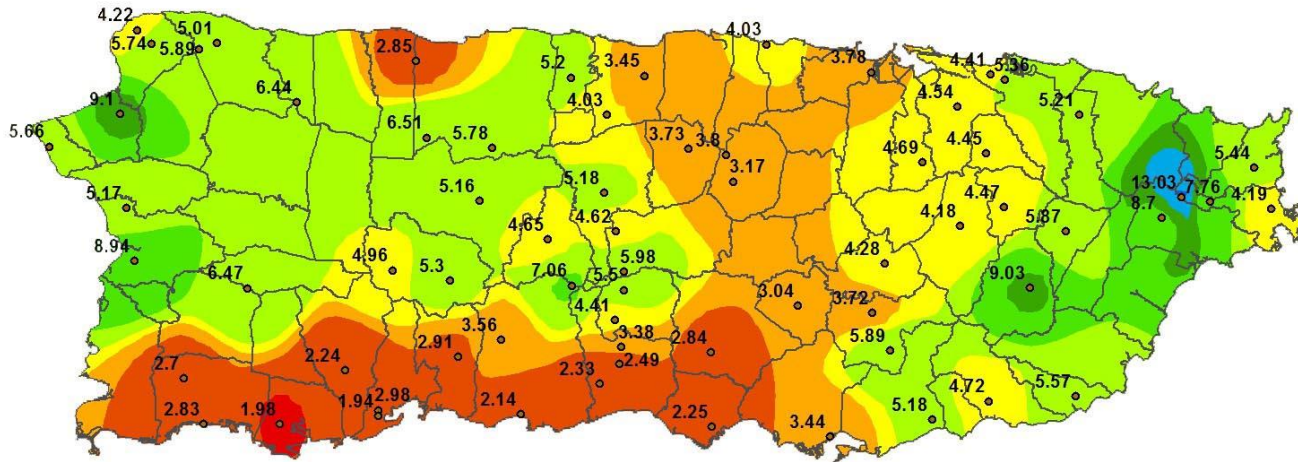




June Normal Rainfall 1981 - 2010



PUERTO RICO



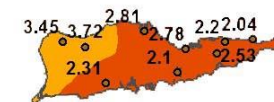
Monthly Rainfall (Inches)



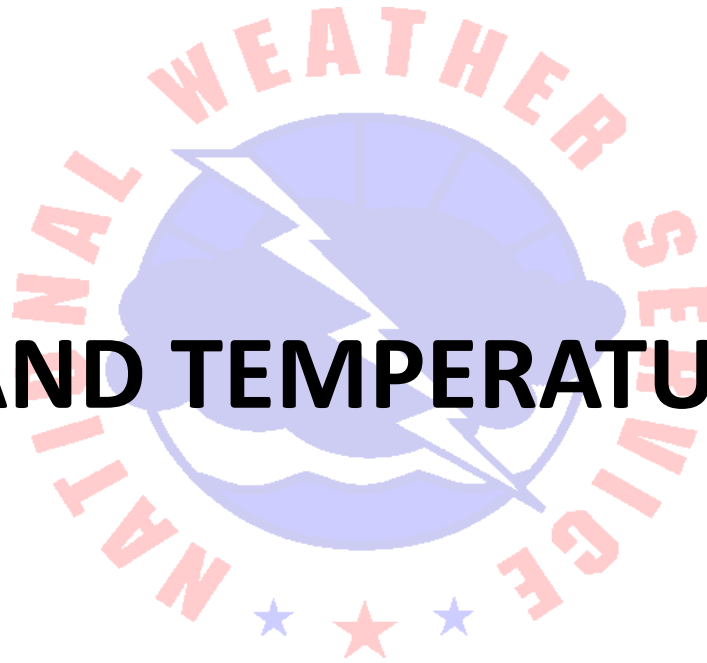
ST. THOMAS / ST. JOHN



ST. CROIX



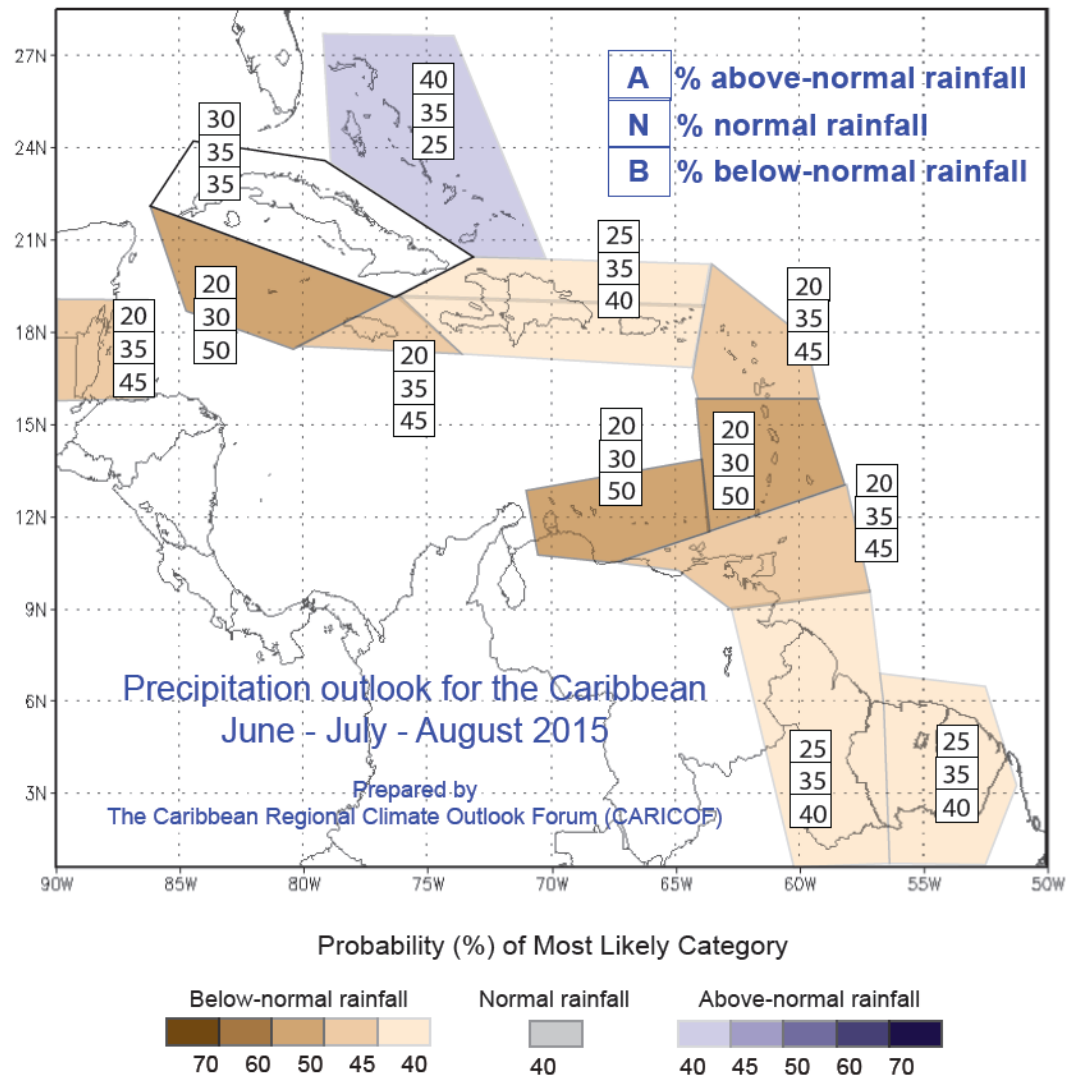
RAINFALL AND TEMPERATURE OUTLOOK



WFO

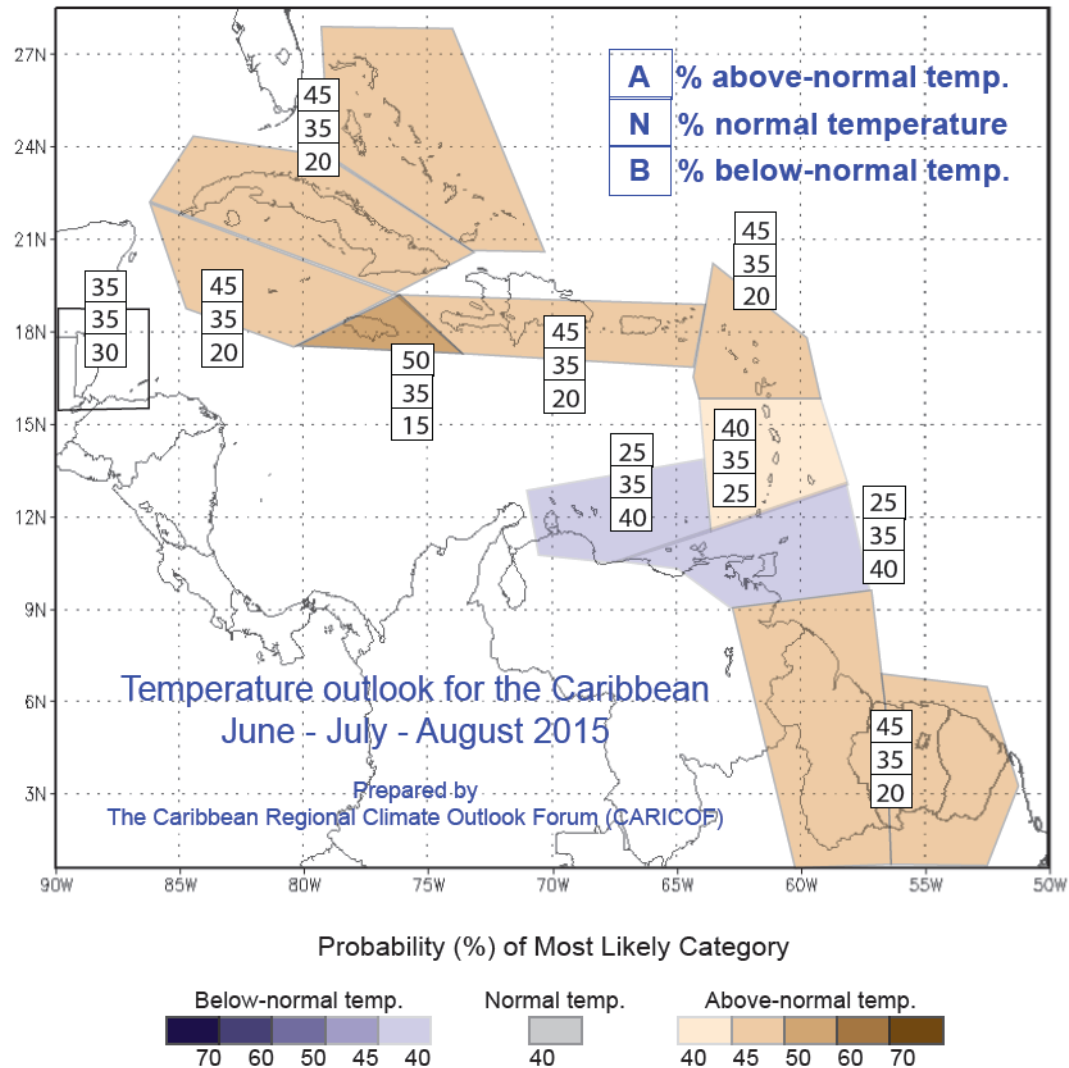
SAN JUAN





<http://www.cimh.edu.bb/?p=precipoutlook>





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